

REMARKS:

Applicant has carefully studied the nonfinal Examiner's Action and all references cited therein. The amendment appearing above and these explanatory remarks are believed to be fully responsive to the Action. Accordingly, this important patent application is now believed to be in condition for allowance.

Applicant responds to the outstanding Action by centered headings that correspond to the centered headings employed by the Office, to ensure full response on the merits to each finding of the Office.

Claim Rejections – 35 U.S.C. § 101

Applicant acknowledges the quotation of 35 U.S.C § 101.

Claims 1-6, 11, 12, 19, 20, 22 and 24 stand rejected under 35 U.S.C § 101 as being directed to non-statutory subject matter.

In consideration of the amendment to the claims as presented in response to this Office Action, applicant believes that the 35 U.S.C § 101 rejections have been overcome and that the claims are now in condition for allowance.

Additionally, claims 19-22 have been canceled. Applicant reserves the right to pursue these claims further upon the filing of a divisional in response to the previous restriction requirement or as a Continuation in Part application.

Claim Rejections – 35 U.S.C. § 112

Applicant acknowledges the quotation of 35 U.S.C § 112, second paragraph.

Claims 1-3, 5, 12, 18 and 24 stand rejected under 35 U.S.C § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, claim 2 stands rejected in that the formula entered into claim 2 is not fully described as to parameters therein, such as "K" etc.

Applicant respectfully traverses the finding of the Office. As such, Applicant believes that the claims presented are definite as viewed from the vantage point of a person of ordinary skill in the art and that the prima facie case of indefiniteness has not been established. While additional specific parameters have not been identified by the Office, the applicant point out that the variable "K" is adequately defined in the claim. In the statement, $k \in \{1, \dots, K\}$ which indexes the directions of the multidimensional space, it is clear from this statement that "K" would be equivalent to the total number of dimensions in the multidimensional space.

In view of the amendment to the claims, Applicant believes that the 35 U.S.C § 112, second paragraph rejection has been overcome and that the claims are in condition for allowance.

Applicant acknowledges the quotation of 35 U.S.C § 112, first paragraph.

Claims 1-3, 18 and 24 stand rejected under 35 U.S.C § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Office states that new matter was added via amending, filed 5/24/04. The Office contends that in claim 1, line 4, part (a), the amendment to require the providing of observations which are "related" to objects in contrast to the previous form of the claim wherein the observations are "on the objects" is considered broadening and therefore new matter.

Applicant respectfully traverses the finding of the Office. The amendment presented on 5/24/04 effectively substituted the limitation, "on the objects", with the limitation, "related to the objects". Applicant believes that the Office has incorrectly interpreted the amendment. The relatedness is not believed to be broader because "related to the objects" does not include observations that are not "on the objects" and does not include objects that are unrelated to "the objects" because the phrase "the objects" is still part of the limitation.

Claim Rejections – 35 U.S.C. § 102

Applicant acknowledges the quotation of 35 U.S.C § 102(a) and (e)(2).

Claims 13-15, 19 and 21-23 stand rejected under 35 U.S.C § 102(a) and (e)(2) as being anticipated by Cabib et al. (U.S. Patent No. 5,784,162).

The Office states that Cabib et al. discloses the practice of imaging for biological research and medical diagnostics in the abstract wherein the last line therein indicates the interpretation of data using a mathematical algorithm. With specific reference to Claim 13, the Office cites column 5, line 61 through column 6, line 63 of Cabib as describing the imaging as being performed as directed to nucleic acids, via hybridization, and to distinguish cancer from healthy cells.

Claims 19-22 have been canceled.

Claims 13-15 have been amended and are now believed to be in condition for allowance.

Claim Objections

Claims 2, 5, and 12 stand objected to due to subscripts being so small in the formula therein set forth as to be unreadable.

Accordingly, the formulas and associated subscripts in the claims have been enlarged to improved readability.

If the Office is not fully persuaded as to the merits of Applicant's position, or if an Examiner's Amendment would place the pending claims in condition for allowance, a telephone call to the undersigned at (727) 507-8558 is requested.

Very respectfully,

SMITH & HOPEN

By: 

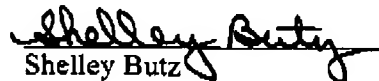
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Dated: November 12, 2004

CERTIFICATE OF FACSIMILE TRANSMISSION
(37 C.F.R. 1.8(a))

I HEREBY CERTIFY that this Amendment AF is being transmitted by facsimile to the United States Patent and Trademark Office, Art Unit 1631, Attn.: Ardin H. Marschel, (703) 872-9307 on November 12, 2004.

Dated: November 12, 2004


Shelley Butz